

Math 212
Quiz 27

W 02 Nov 2016

Your name: _____

Exercise

(2 pt) Let $f : \mathbf{R}^2 \rightarrow \mathbf{R}$ be continuous (so that Fubini's theorem applies). Change the order of integration of the following iterated integrals. *Hint:* Sketch each region of integration.

(a) (1 pt) $\int_0^1 \int_0^{2y} f(x, y) \, dx \, dy$

(b) (1 pt) $\int_0^9 \int_{\frac{1}{3}y}^{\sqrt{y}} f(x, y) \, dx \, dy$